

## Amendments to the Claims

1. (Previously Presented) In a wireless communication system in which a mobile station engages in a call via air interface communication with a base station, a method comprising:

the base station making a determination that the call has been dropped; and  
responsive to the base station making the determination that the call has been dropped, determining a call-drop location of the mobile station,

wherein making the determination that the call in which the mobile station was engaged has been dropped comprises determining, at the base station, that a duration of bad frames received on a reverse traffic channel (RTCH) carrying communications from the mobile station to the base station is greater than a threshold level,

wherein the base station determines that no call-drop event has occurred if a duration of good frames are received at the base station from the mobile station within a predefined period of time after receiving the duration of bad frames,

wherein the wireless communication system comprises position determining equipment (PDE); and

wherein determining the call-drop location comprises the base station sending a position request to the PDE to determine the location of the mobile station, the position request including a mobile identification number (MIN) identifying the mobile station.

2. (Cancelled)

3. (Previously Presented) The method of claim 1, wherein the mobile station is communicatively coupled a network entity over the air interface, the method further comprising storing the call-drop location in the network entity.

4-9. (Cancelled)

10. (Original) The method of claim 1, wherein making the determination that the call in which the mobile station was engaged has been dropped comprises the base station determining that the call cannot be handed off to another cell-site.

11-20. (Cancelled)

21. (Currently Amended) A system comprising:  
a mobile station;  
a base station communicatively coupled to the mobile station;  
wherein the mobile station is arranged to engage in a call over an air interface;  
and

wherein the base station is arranged to:

(i) make a determination that the call in which the mobile station was engaged has been dropped by determining that a duration of bad frames received on a reverse traffic channel (RTCH) carrying communications from the mobile station to the base station is greater than a threshold level, wherein the base station determines that no call-drop event has occurred if a duration of good

frames are received at the base station from the mobile station within a predefined period of time after receiving the duration of bad frames; and

(ii) responsive to making the determination that the call in which the mobile station was engaged has been dropped, cause position determining equipment (PDE) to determine a call-drop location of the mobile station.

22-23. (Cancelled)

24. (Original) The system of claim 21, wherein the threshold level is twenty bad frames.

25. (Previously Presented) The system of claim 21,  
wherein the base station comprises memory; and  
wherein the base station is further arranged to store the call-drop location in the memory to thereby log locations of call drop events.

26. (Previously Presented) The system of claim 21, wherein the base station being arranged to make the determination that the call in which the mobile station was engaged has been dropped comprises the base station being arranged to make the determination that the call cannot be handed off to another a cell-site.

27. (Cancelled)

28. (Currently Amended) A base station comprising:

a first routine to make a determination that a call in which a mobile station was engaged has been dropped by determining that a duration of bad frames received on a reverse traffic channel (RTCH) carrying communications from the mobile station to the base station is greater than a threshold level, wherein the base station determines that no call-drop event has occurred if a duration of good frames are received at the base station from the mobile station within a predefined period of time after receiving the duration of bad frames; and

a second routine to cause position determining equipment (PDE) to determine a call-drop location of the mobile station in response to the first routine making the determination that the call in which the mobile station was engaged has been dropped.

29. (Canceled)